

BIOTERRORISM:
RICIN

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

TACTICS AGAINST TERRORISM: **RICIN**

South Carolina Department of Health and Environmental Control
Office of Public Health Preparedness



What is bioterrorism?

Bioterrorism is the intentional use of bacteria, viruses, or natural toxins (poisons) as a weapon to kill, injure or produce disease in humans, animals or plants. Terrorists may use such an attack to create fear, disrupt the economy, or to get a response from the government.

What is ricin?

Ricin is a poison found naturally in castor beans. If castor beans are chewed and swallowed, the released ricin can cause injury. Ricin can also be made from the waste material left over from processing castor beans.

Forms of ricin

Ricin can be made into a powder, a mist or a pellet. It can also be dissolved in water.

How ricin can be used for terrorism

The chance of being poisoned by ricin is very small. It would take an intentional act to make ricin and then use it to poison people. Terrorists can use ricin as a weapon to attack many people at one time. Ricin can be spread to people by:

- Releasing the powder or mist into the air.
- Releasing the powder or mist in a building's air system.
- Sending ricin powder or pellets through the mail.
- Adding large amounts of ricin powder or pellets to a city's water supply.
- Adding ricin powder or pellets to food.

Ricin was used in an extortion attempt in October 2003 discovered in Greenville, South Carolina. It was sent in a sealed container with a letter destined for Washington, D.C. that threatened to poison water supplies unless specific demands were met. The package was found at a post office before anyone was hurt.

Treating ricin poisoning

If you are exposed to ricin, go to the hospital right away. There is no medicine to treat ricin poisoning. A doctor can give you medicine and other supportive care to treat your symptoms. You could die from ricin poisoning within 36 to 72 hours after you are exposed if your symptoms are left untreated. How sick you get depends on how you were exposed to ricin and how much you were exposed to. If you survive more than three to five days, you will probably get better.

If you breathe in ricin, you could experience:

- Trouble breathing
- Fever
- Cough
- Nausea
- Tightness in the chest
- Joint pain
- Heavy sweating.

You could have symptoms within eight hours of breathing in ricin. If you do not get to a hospital for medical care right away, you could stop breathing and die.

If you swallow ricin, you could experience:

- Vomiting (might be bloody)
- Diarrhea (might be bloody)
- Fever
- Thirst
- Sore throat
- Headache
- Stomach pain
- Low blood pressure
- Hallucinations
- Seizures
- Blood in the urine.

You could see symptoms within six hours of eating or drinking food or beverages with ricin in them. If you do not go to a hospital for medical care right away, your internal organs might stop working and you could die.

Ricin as a powder or mist can cause redness and pain of the skin and the eyes.

How to protect yourself and others

It is important to remember that ricin poisoning is not contagious. It cannot be spread from person to person.

- If ricin is released in the air outside, get fresh air by leaving the area where the ricin was released.
- If ricin is released indoors, get out of the building.
- If you think you have been exposed to ricin, you should call 9-1-1, take off your clothing (as described below), wash your body with soap and water, and get medical care right away.
- Don't pull clothing off over your head to remove. Cut it off instead. You don't want ricin on your clothes to get in your eyes.
- Handling removed clothing:
 - Put clothes inside a plastic bag.
 - Avoid touching surfaces where there is ricin. If you aren't sure where the ricin is, wear rubber gloves or pick your clothes up with another object, like tongs or sticks.
 - Anything that touches the clothes should be put in the plastic bag.
 - Seal the bag and put it inside another plastic bag.
 - Wash your hands thoroughly with soap and water.
 - Ask police before throwing away removed clothing. The clothing could be needed as evidence.
- If your eyes are burning or you have blurry vision, rinse your eyes with plain water for 10 to 15 minutes. If you wear contacts, take them out and put them in a plastic bag with your clothes. If you wear glasses, wash them with soap and water. You can then put them back on.
- If you get ricin poisoning by drinking water or eating food, do not make yourself vomit or drink any other fluids. Seek medical attention right away.

What's being done to protect you

- The South Carolina Department of Health and Environmental Control (DHEC) and the Centers for Disease Control and Prevention (CDC) keep constant watch for cases of ricin exposure. Every case of ricin poisoning would be treated as an emergency.
- DHEC provides technical assistance to public drinking water systems concerning emergency response issues and bioterrorism.
- Doctors, hospitals, health departments and anyone who may know of a possible ricin exposure are to report any cases to DHEC.
- The Palmetto Poison Center (PPC) is also available to report possible ricin exposures 24 hours a day. The PPC will work with DHEC and report possible cases for follow-up.

If there is a terrorist event using ricin, local and state law enforcement and health agencies will provide you additional instructions for protecting yourself.

Numbers to know

For all emergencies: 9-1-1

SC DHEC (*during business hours*): (803) 898-3432

CDC: (800) 232-4636

Palmetto Poison Center: (800) 222-1222

For more information

SC DHEC

www.scdhec.gov

www.scdhec.gov/tat (*Tactics Against Terrorism*)

www.scdhec.gov/health/disease/han/ricin.htm

CDC

www.bt.cdc.gov

www.bt.cdc.gov/agent/ricin

USDA

www.fsis.usda.gov

The phone numbers for reporting cases or possible cases of bioterrorism to your local health department and the DHEC Division of Acute Disease Epidemiology are available at: www.scdhec.gov/administration/library/CR-009025.pdf

This publication provides health information for your general knowledge. Talk to your doctor about your concerns about any medical condition. DHEC does not recommend you diagnose or treat yourself for a serious illness.

Notes:







South Carolina Department of Health
and Environmental Control

www.scdhec.gov/tat

SOUTH CAROLINA

**Tactics
Against
Terrorism**

Be Safe. Be Smart.